

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A process for producing ~~the following~~ a fluorinated ester (1), ~~which comprises, comprising:~~

~~a transesterification step in which~~ reacting the following fluorinated ester (1) and the following compound (2) ~~are reacted~~ for transesterification to obtain the following compound (3), and

~~a fluorination step in which~~ fluorinating the compound (3) ~~is then fluorinated~~ to obtain the ~~following~~ fluorinated ester (1) in an amount larger than the molar amount prior to the transesterification:



wherein R^A is a monovalent organic group, and

R^{AF} is the same group as R^A or a monovalent organic group obtained by fluorination of R^A .

2. (Currently Amended) The process ~~for producing the fluorinated ester (1)~~ according to Claim 1, wherein in the transesterification step, at most twice by mol of the compound (2) is reacted ~~to~~ with the fluorinated ester (1) for transesterification.

3. (Currently Amended) The process ~~for producing the fluorinated ester (1)~~ according to Claim 1, wherein ~~in the fluorination step~~, the fluorination of the compound (3) is carried out by introducing fluorine gas into a liquid phase.

4. (Currently Amended) The process ~~for producing the fluorinated ester (1)~~ according to Claim 1, wherein ~~in the fluorination step~~, the fluorination of the compound (3) is carried out by introducing fluorine gas into a liquid phase having the fluorinated ester (1) or the following fluorinated acyl fluoride (4) dissolved therein:



wherein R^{AF} is as defined above.

5. (Currently Amended) The process ~~for producing the fluorinated ester (1)~~ according to Claim 1, wherein in the fluorination step, the compound (3) containing the following fluorinated acyl fluoride (4) and/or the compound (1) formed in the transesterification step, is used as it contains the fluorinated acyl fluoride (4) and/or the compound (1):



wherein R^{AF} is as defined above.

6. (Currently Amended) The process ~~for producing the fluorinated ester (1)~~ according to Claim 1, wherein the transesterification step is carried out in the absence of a solvent.

7. (Currently Amended) The process ~~for producing the fluorinated ester (1)~~ according to Claim 1, wherein the fluorinated ester (1) in the transesterification step is the fluorinated ester (1) obtained in the fluorination step.

8. (Currently Amended) The process ~~for producing the fluorinated ester (1)~~ according to Claim 1, wherein the fluorinated ester (1) used in the transesterification step is produced by a step of obtaining the following compound (3) by reacting the following fluorinated acyl fluoride (4) and the following compound (2), and fluorinating the obtained compound (3) in a liquid phase:



wherein R^A and R^{AF} are as defined above.

9. (Original) A process for producing a fluorinated acyl fluoride (4), which comprises dissociating the ester bond of the following fluorinated ester (1) obtained by the process as defined in Claim 1:

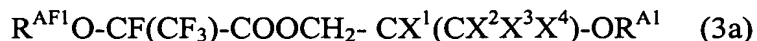


wherein R^{AF} is as defined above.

10. (Currently Amended) The process ~~for producing the fluorinated ester (1)~~ according to Claim 1, wherein the fluorinated ester (1) is the following compound (1a), the compound (2) is the following compound (2a), the compound (3) is the following compound (3a), and R^{AF} is

$R^{AF1}O-CF(CF_3)-$:

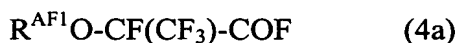




wherein R^{A1} is a monovalent organic group, R^{AF1} is the same group as said R^{A1} or a monovalent organic group obtained by fluorination of said R^{A1} , and each of X^1 , X^2 , X^3 and X^4 which may be the same or different, is a hydrogen atom or a fluorine atom.

11. (Currently Amended) A process for producing ~~the following~~ a fluorinated vinyl ether (5a), ~~which comprises~~ comprising:

dissociating the ester bond of the following compound (1a) obtained by the process as defined in Claim 10, to obtain the following compound (4a), and pyrolyzing the compound (4a):



wherein R^{AF1} is as defined above.

12. (Currently Amended) A process for producing ~~the following~~ a fluorinated vinyl ether (5a), which comprises pyrolyzing the following compound (1a) obtained by the process as defined in Claim 10, at a temperature of at least 250°C:



wherein R^{AF1} is as defined above.

13. (New) The process according to Claim 1, wherein an equimolar amount of the compound (2) is reacted with the fluorinated ester (1) for transesterification to form an equimolar amount of the compound (3) and an equimolar amount of the fluorinated acyl

fluoride (4) ($R^{AF}COF$), and then, the fluorinated acyl fluoride (4) is further reacted with an equimolar amount of the compound (2) to form an equimolar amount of the compound (3).

14. (New) The process according to Claim 1, wherein said monovalent organic group is a monovalent hydrocarbon group, a halogeno monovalent hydrocarbon group, a heteroatom-containing monovalent hydrocarbon group or a halogeno(heteroatom-containing monovalent hydrocarbon) group.

15. (New) The process according to Claim 1, wherein a temperature for the reaction of the fluorinated ester (1) and the compound (2) is at least $-50^{\circ}C$ and at most $+100^{\circ}C$ or at most the boiling point of a solvent used during the transesterification.

16. (New) The process according to Claim 1, wherein an HF scavenger is present during said transesterification.

17. (New) The process according to Claim 1, wherein a reaction product of said transesterification comprises, in addition to the compound (3), unreacted fluorinated ester (1) and compound (2), and a fluorinated acyl fluoride (4): $R^{AF}-COF$ (4)
wherein R^{AF} is as defined above.

18. (New) The process according to Claim 1, wherein the fluorine content of the compound (3) is at least 30 mass%.

19. (New) The process according to Claim 1, wherein the molecular weight of compound (3) is 200 to 1000.

20. (New) The process according to Claim 1, wherein the reaction temperature for the fluorination reaction is at least -60°C and at most the boiling point of the compound (3).

BASIS FOR THE AMENDMENT

Claim 2 has been amended to correct a minor informality.

New Claims 13-20 have been added.

New Claim 13 is supported at page 7, lines 13-20 of the specification.

New Claim 14 is supported at page 8, lines 18-22.

New Claim 15 is supported at page 16, lines 15-18.

New Claim 16 is supported at page 16, line 4.

New Claim 17 is supported at page 17, lines 6-10.

New Claim 18 is supported at page 18, lines 10-11.

New Claim 19 is supported at page 18, lines 21-22.

New Claim 20 is supported at page 23, lines 9-10.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-20 will now be active in this application.